Safety

Prevention of Motor Vehicle Accidents

Headquarters
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Unclassified

Chapter 1 General

1-1. Purpose

This regulation establishes responsibilities and procedures for carrying out the Army Safety Program's motor vehicle accident prevention effort and reducing the risk of death and injury to Army personnel in privately owned vehicle (POV) accidents.

1-2. References

Required and related publications and referenced forms are listed in appendix A.

1-3. Explanation of abbreviations and terms

Abbreviations and special terms used in this regulation are explained in the glossary.

1-4. Responsibilities

- a. The Deputy Chief of Staff for Personnel has overall responsibility for developing Army policy for safe operation of Army motor vehicles (AMVs). The Director of Army Safety is responsible for formulating this policy.
- b. The Commander, U.S. Army Safety Center will develop policy recommendations in the motor vehicle area and provide a variety of data analysis and countermeasure programs to support field motor vehicle accident prevention efforts.
 - c. Commanders at all levels will ensure that-
- (1) Procedures are prescribed for the safe operation of AMVs, combat vehicles, materiel-handling equipment, and POVs on and off Army installations and contractor vehicles on post.
- (2) Vehicle operations and maintenance are carried out in accordance with Army regulations and technical manuals. Documentation of inspections is based upon Federal Highway Safety Program Standards (HSPS). The HSPS modified for Army use are in appendix B.
- (3) Motor vehicle activities and accident data are collected, analyzed, and evaluated to identify where accident prevention efforts must be focused.
 - (4) High-quality personnel are selected for testing and training.
 - (5) Supervision of Army drivers is maintained.
- (6) On-post roads and trails are maintained at a level that will permit safe vehicle operations.
- (7) Training, education, and motivation programs dealing with POVs are developed and applied.
- d. Army installation commanders will base their traffic safety programs on Highway Safety Program Standards (23 CFR 1230). The minimum requirements for these standards are outlined in appendix B. In addition to helping develop programs, commanders should use the Highway Safety Program Manuals published by the U.S. Department of Transportation, National Highway Traffic Safety Administration, 400 7th Street SW, WASH DC 20590.

1-5. Objectives

- a. The AMV safety objective is to provide training and guidance to operators of all AMVs, combat vehicles, and materiel-handling equipment to enable them to safely transport personnel and property by motor vehicle with the least possible risk.
- b. The POV safety objective is to provide personnel with training and guidance to reduce their risk of death or injury from POV accidents.

1-6. Funding

Funds required to implement provisions of this directive will be programmed into the annual installation budget request.

Chapter 2

Prevention of Army Motor Vehicle Accidents

Section I

Producing Safe Driving Behavior

2-1. General

Most Army motor vehicle accidents are caused by driver error. Proper selection, training, and supervision of drivers will help to prevent these errors.

2-2. Driver selection

Drivers will be selected, trained, tested, and licensed according to AR 600-55, FM 21-17, and FM 55-30.

2-3. Driver training

Commanders will ensure that AMV drivers and other Army equipment operators receive training and education that meet the requirements of—

- a. Modified HSPS No. 4 (app B).
- b. AR 600-55.
- c. Department of the Army (DA) Technical Manuals and Field Manuals containing procedures to follow in selecting, training, examining, licensing, and supervising vehicle drivers or equipment operators.

2-4. Investigating and reporting accidents

- a. Army motor vehicle accidents will be investigated and reported in accordance with AR 385-40 and AR 190-5. The Provost Marshal and the installation safety office should coordinate to ensure completeness of accident reports and to avoid duplication of efforts.
- b. Commanders responsible for motor vehicle operations will ensure that—
- (1) Investigative procedures reveal operator task errors, management or supervisory errors, equipment failures, and environmental factors causing or contributing to the accident. As an aid to AMV accident investigation, SF 91 (Operator Report of Motor Vehicle Accident) should be available to operators.
- (2) Systems defects causing or contributing to these factors are identified and corrected.
- c. Medical authorities will identify in all AMV accident reports nonuse or failure of installed restraint systems contributing to injury to Army personnel and recommend remedial measures.

2-5. Motivating safe performance

- a. Commanders will—
- (1) Consider assigning designated drivers and alternate drivers to vehicles. This practice fosters "pride in ownership "and designates responsibility for operator maintenance.
- (2) Annually recognize vehicle operators, who maintain outstanding safe driving records, and units with outstanding records. DA Form 1118 (Certificate of Merit for Safety), DA Form 1119–1 (U.S. Army Safety Award), or other forms of recognition will be used. Other incentives for safe driving performance are as follows:
- (a) The Driver and Mechanic Badge for military and civilian personnel as prescribed in AR 672-5-1.
- (b) The National Safety Council Safe Driver Award for Army civilian personnel who drive AMVs within the United States.
- (c) Suggestions, superior accomplishments, and honorary awards as prescribed in AR 672-74.
- (d) Consideration of an individual's superior driving record when assigning vehicles, routes, and duties.
 - b. Supervisors of AMV operations will—
- (1) Set standards of performance for vehicle operations to ensure continuity, safety, consistency, and clarity so drivers are aware of and understand their responsibilities.
 - (2) Periodically assess driver performance and use incentives to

reward drivers with good driving records. Drivers failing to maintain good driving records will be subjected to remedial and disciplinary measures when appropriate.

2-6. Safe driving operation

- a. Drivers will not be assigned to drive an AMV for more than 10 continuous hours, nor will the combined duty period exceed 12 hours in any 24-hour period without at least 8 consecutive hours of rest
- b. If more than 10 hours are needed to complete operations, a qualified assistant driver must be assigned to each vehicle.
- c. Drivers will take 15-minute rest breaks every 2 to 3 hours of driving or every 100 to 150 miles, whichever occurs first. During these breaks, drivers will inspect their vehicles and ensure equipment and cargo are secure. One-hour meal breaks must also be taken. (Commanders may require additional rest periods based on local conditions or for specific missions or operations. They should do so whenever operators can be expected to encounter unusually poor weather or road conditions, when hazardous materials are being transported, or operators will be involved in prolonged or unusually difficult exercises or operations.)
- d. The use of headphones or earphones while driving Army motor vehicles (two or more wheels) is prohibited; however, this prohibition does not negate the requirement for wearing hearing protection where conditions require their use. (See TB Med 501.)
- e. Drivers will not consume intoxicating beverages during the 8 hours prior to scheduled duty or during their normal duty shift.
- f. Drivers will not eat, drink or smoke while the vehicle is in motion. Smoking reduces night vision.

Section II Vehicle Safety Standards

2-7. General

- a. Before vehicle dispatch, commanders or their representatives will ensure that drivers perform before-, during-, and after-operation checks to prevent the following conditions:
- (1) Improper functioning or adjustment of steering, lights, windshield wipers, horns, warning signals, side or rearview mirrors, restraint systems, and other safety devices. Restraint systems will be readily available for use by both the driver and passengers.
- (2) Improper condition of windshields, windows, mirrors, lights, reflectors, or other safety devices that are broken, cracked discolored, or covered with frost, ice, snow, dirt, mud, or grime.
- (3) Defective, inoperable, or out-of-adjustment service or parking brakes. Vehicles with defective parking brakes will be not mission capable (NMC) until repaired. When vehicles with service brake conditions are moved for maintenance, they will be towed using a tow bar.
- (4) Leaks. Vehicles with any gasoline leak or a Class III diesel, oil, or water leak will be NMC until repaired.
- (5) Any condition likely to cause injuries to personnel or failure of a component. Examples are tires that are excessively worn, deeply cut, or have exposed cords; cracked wheel hubs; worn or frayed tiedown straps or personnel restraint systems; torn sheet metal with exposed sharp edges; damaged or missing exhaust pipe shields; and leaks from exhaust systems.
 - (6) Improperly secured loads.
 - (7) Vehicle loaded beyond design load limits.
- (8) Unsafe transport of personnel. Movement of personnel will be in accordance with paragraph 2–17.
- b. Driver training courses and driver performance evaluations will include safety aspects of driver maintenance.
- c. Commanders determining that an AMV accident was caused by design or component failure will submit appropriate reports per AR 385-40 and DA Pam 738-750.
- d. Operators are responsible for bringing any vehicle shortcoming to the supervisor's attention. Further, no vehicle will be operated

with conditions outlined in a (1) through (8) above unless authorized by the unit commander.

2-8. Motor vehicle safety standards

- a. Commercial type passenger-carrying AMVs built to manufacturers' specifications and purchased, leased, or rented by the Army are required to meet all applicable requirements of the Federal Motor Vehicle Safety Standards (FMVSS).
- b. Nondevelopmental item (NDI) vehicles built to Government-modified manufacturers' specifications will also meet applicable requirements of the FMVSS unless a written waiver is obtained from Commander, U.S. Army Safety Center, ATTN: PESC–PR, Fort Rucker, Alabama 36362–5363, or HQDA (DAPE–HRS), WASH DC 20310–0300.
- c. Foreign-built commercial vehicles purchased for use outside the continental United States (CONUS) and U.S. territories and possessions will meet all applicable safety requirements of the country in which they are registered or assigned. Prior to procuring foreign-built commercial vehicles, commanders of OCONUS major Army commands will review the motor vehicle safety standards for acceptability. The review will include all standards applicable to the make, model, and year of manufacture for each type vehicle to be procured.
- d. Tactical and combat vehicles are exempt from FMVSS; however, their design characteristics will comply with the intent of those standards except when compliance would degrade essential military capabilities. Commanders responsible for establishing design characteristics will follow DOD Military Standard (MIL–STD) 1180 (AT). Copies may be obtained from the U.S. Army Tank Automotive Command, ATTN: AMSTA–GSES, Warren, Michigan 48090.
- e. All Army vehicles other than those listed in a, b, and c above will be designed to be equipped with restraint systems unless a waiver is obtained from the U.S. Army Safety Center or HQDA, DAPE-HRS.
- f. All Army vehicles in which the normal structure of the vehicle will not protect the driver and passengers during rollover will be equipped with a rollover protective structure that conforms to applicable Society of Automotive Engineers standards unless a waiver is obtained from the U.S. Army Safety Center or HQDA (DAPE-HRS).
- g. Tactical and combat design wheeled vehicles undergoing developmental testing will be provided with appropriate restraint system/rollover protective structures for protecting test participants, even if the protective devices are not a user requirement.

Section III Environmental Factors/Road Conditions

2-9. Adverse environmental conditions

When military vehicles operate under adverse conditions, commanders will—

- a. Ensure that vehicles are equipped and maintained (good tires, lights, wipers, and chains) to cope with potential adverse conditions.
- b. Ensure that drivers know and follow established emergency procedures.
 - c. Establish road condition notification procedures.
 - d. Limit traffic to mission-essential business.

2-10. Traffic engineering services

Installation commanders will ensure compliance with HSPS Nos. 12, 13, and 14 (app B) in areas within their jurisdictions. Help for traffic engineering services is available from the Military Traffic Management Command. Fences, limiting structures, or other means of access control are encouraged where housing areas are adjacent to high-speed or high-traffic-density roads. (See AR 55–80.)

2-11. Traffic control devices

The ANSI D6.1–1978 manual has been adopted as a DA standard. Commanders should deviate from this standard only when required to be in compliance with uniform traffic control devices adopted by

the State or host nation in which the installation is located. The standard should be available at installation safety offices.

Section IV Safe Vehicle Operations

2-12. Fire prevention

The following are precautions against AMV fires:

- a. No AMV will be operated unless it is entirely free of gasoline leaks and Class III diesel, oil, and water leaks. Class III leaks are significant when they are great enough to form drops from the item being inspected or checked.
- b. Electric lamps used to examine or repair vehicles must meet the standards of the National Electric Codes. Open flames will not be used.
 - c. Smoking is prohibited—
- (1) In shops, garages, or motor pool parking areas except in areas specifically designated by competent authority as smoking areas.
- (2) Within 50 feet of vehicles loaded with flammable or combustible liquids with a flashpoint below 200° F., flammable gases, or explosives.
- (3) In the presence of flammable vapors such as those present when fueling vehicles or examining or repairing engines or fuel systems. "No Smoking "signs will be posted conspicuously.
 - (4) By the vehicle operator at any time the vehicle is in motion.
- d. Drivers will turn off engine, put transmission in low gear, or park position if automatic, and use parking brakes when fueling vehicles or when leaving them unattended while being fueled. When low temperatures prevent setting the parking brakes, wheels will be chocked. Fueling will be discontinued when there is lightning within 5 miles.
- e. Fuels, paints, lubricants, flammable cleaning solvents, rags saturated with paint or oil, and other flammable and combustible materials used in motor shops or garages will be handled as prescribed in applicable regulations or directives (for example, FM 10–69). All flammable and combustible waste material will be removed to a collection area outside motor shops and garages at the close of each workday.
- f. Trucks loaded with combustible waste will be unloaded before being parked for the night.
- g. Gasoline will not be used for any cleaning purpose; only approved types of solvents will be used. Information on recommended solvents can be obtained from installation safety or preventive medicine personnel.
- h. Vehicles transporting explosives will be equipped with two fire extinguishers. All vehicles carrying chemical munitions will have as one of their extinguishers a serviceable 10–BC rated carbon dioxide or dry chemical extinguisher. Situations requiring a fire extinguisher in a vehicle are as follows:
- (1) In vehicles responding to calls for assistance, such as fire, police, and security protection.
- (2) In AMV personnel carriers with a capacity of five or more persons.
- (3) When carrying valuable equipment or materials on a mission requiring special protection.
- i. To minimize the danger of fire or explosion caused by static sparks, the following is required:
- (1) Positive bonding connections between gasoline tank trucks and the source from which the tank truck is being filled or offloaded.
 - (2) Grounding of tank trucks before approaching the fuel tank.

2-13. Transport of hazardous material

a. Vehicles transporting hazardous materials such as flammables, ammunition, poisons (Class A or B), radioactive yellow–III label materials, explosives, or combustibles will be appropriately placarded on all sides and comply with part 171, title 49, Code of Federal Regulations (49 CFR 171) or host nation requirements. Bilingual placards will be used where necessary. Loads will be

blocked and braced in accordance with Department of Transportation (DOT) regulations and applicable Army regulations to prevent shifting.

- b. Drivers of vehicles transporting hazardous materials will-
- (1) Follow a preplanned route that minimizes exposure in densely populated areas.
- (2) Park in areas where exposure to inhabited buildings and public gatherings is limited. At no time will they park less than the appropriate fire separation distance required by the National Fire Protection Association for the hazardous material involved.
- c. Vehicles transporting ammunition, poisons (Class A or B), radioactive yellow-III label materials, and explosives on public highways will be—
- (1) Loaded to meet hazard classification and compatibility requirements listed in current 49 CFR 390, except as permitted by international agreements or Status of Forces Agreements (SOFA) such as North Atlantic Treaty Organization (NATO), AC/258–D/258.
- (2) Offloaded before major maintenance is performed. Normal servicing and minor repairs may be made when uploaded if practical and necessary for safe movement. (There is no restriction on a tractor separated by 50 feet from an explosives-loaded trailer.)
- (3) Inspected per AR 55–355 before being loaded and when entering an Army establishment before unloading, using DD Form 626 (Motor Vehicle Inspection). All unsatisfactory conditions found must be corrected before loading. An inspection point will be provided for, and in case of emergencies, a remote area designated as a suspect area will also be provided.
 - d. Vehicles carrying material described in c above should—
 - (1) Be fueled and inspected for proper condition before loading.
- (2) Be the van type or be equipped with side stakes with the cargo protected by a tarpaulin or canvas top.
- (3) Have brakes set and at least one wheel chocked during all loading or unloading and tiedown operations.
- e. The receiving organization will report damaged or improper shipment of hazardous materials on SF 364 (Report of Discrepancy). (See AR 55–355.) A copy of the SF 364 will be provided to the organizational safety office.
- f. Shipping containers for hazardous materials will meet current DOT regulations to include identification of contents by proper shipping name. Damaged containers will not be repaired in the vehicle.
- g. No person will be allowed to ride on or in the cargo compartment of a motor vehicle transporting explosives, fuel, or other hazardous materials.
- h. Explosives will not be transported in the passenger compartment of materiel-handling equipment or commercial AMVs. This restriction does not prohibit carrying basic operational loads for law enforcement weapons. Tactical or combat vehicles may have operational and basic loads of ammunition stored in crew compartments.
- *i*. An assistant driver should be used when transporting hazardous materials.

2-14. Precautions against asphyxiation

The following are safety measures against asphyxiation:

- a. Vehicles will be periodically inspected to ensure that there are no leaks in the exhaust system. Periodically means—
 - (1) Any scheduled maintenance service or annual inspection, or
- (2) At intervals established by local authority or higher commands.
- b. Garages, shops, and other enclosed areas used for vehicles must be adequately ventilated at all times to prevent overexposure to exhaust gases from vehicle engines or space heaters.
- (1) Vehicle engines will not be run in a garage or shop longer than needed to move the vehicle in or out. The only exception is if open doors and windows or exhaust systems are adequate for removing engine gases.
- (2) Periodic tests will be performed by qualified personnel to determine the presence and level of carbon monoxide and other

exhaust gases. Tests should be performed during full working conditions. Immediate corrective measures will be instituted when over-exposure is detected. Procedures are outlined in AR 385–10. Methods to identify symptoms of carbon monoxide poisoning and procedures for treatment and prevention of overexposure are in TB Med 269.

- c. Vehicles with articulating exhaust systems will emit carbon particles when cold. The system is designed with welded and sliding joints with ball-and-socket-type joints on the main exhaust tube; however, as the system becomes heated, the joints self-seal. Before complete expansion, a certain amount of carbon will escape around the joints. Personnel will ensure there is adequate ventilation until self-sealing occurs.
- (1) When the power train, cooling, and exhaust systems (as in the M113 family) are separated from the crew by engine access panels, it is the operator or crew responsibility to ensure that the panels seal properly to prevent carbon monoxide from entering the crew compartment.
- (2) Preventive medicine personnel will conduct periodic tests under full working conditions to determine the presence of carbon monoxide
- d. Sleeping in parked vehicles with the engine or heater running is prohibited. Asphyxiation may result from exhaust gases entering the vehicle.

2-15. Convoy operations

- a. Proper planning and control of Army motor columns on public highways are required to prevent traffic congestion and accidents. The assistance of civil police will be requested in advance for all off-post convoy travel. Movement plans will be in compliance with State and local civil traffic regulations unless waived by competent civil authority.
- *b.* Information on planning, operation, and control of motor marches and convoys is in AR 55–29, AR 55–162, AR 600–55, FM 3–20, FM 55–30, and FM 55–312.
- c. Where possible, routes for oversized vehicles will be inspected in advance.
- d. When convoys are to travel on high-speed highways, commanders should place their largest nonpassenger-carrying or non-hazardous-cargo vehicle at the rear of the convoy as a protective block with CONVOY AHEAD signs attached to the rear of the vehicle.
- e. During travel, all vehicles will maintain at least a 2-second interval.

2-16. Use of safety equipment

- a. All personnel operating or riding as a passenger in a Department of Defense (DOD) motor vehicle will wear safety belts when sitting in seats in which safety belts have been installed by the vehicle manufacturer, whether on or off a DOD installation. Individuals will not ride in seats from which manufacturer-installed occupant restraints have been removed or rendered inoperative. The vehicle operator is responsible for informing passengers of the safety belt requirement. The senior occupant is responsible for ensuring enforcement. With respect to civilian employees, when it is not clear who is the senior occupant, the driver is responsible for ensuring enforcement.
- b. Eye protection (goggles) will be worn by vehicle commanders, drivers, and assistant drivers of combat tactical vehicles, not equipped with a windshield or on which the windshield is in the down position. Head protection (helmets or the combat vehicle crewman (CVC) helmet) will be worn at all times by crewmembers and passengers while combat vehicles are being operated.
- c. All trailers operated on Army installations will be equipped with safety chains or similar devices to prevent breakaway trailer accidents. Trailer brake lights, tail lights, and turn signals must be in operating condition.
- d. Tactical vehicle drivers will keep low beam lights on at all times when on public roadways outside military installations except where SOFA or local laws prohibit use of headlights during daylight

- (sunrise to sunset) hours. Use of parking lights only while the vehicle is in motion is prohibited except as directed by military authority. This applies to all vehicles (that is, commercial and tactical) that are under full control and accountability of the U.S. Government.
- e. All military motor vehicles operating over public roads will be equipped with highway warning kits. Vehicles carrying flammable or explosive materials will not use or carry flares. Commanders will establish standing operating procedures for the warning devices used on vehicles. These procedures will be included in the kit.
- f. Stationary, rotating, or flashing lights and sirens will be used for emergency vehicles. Lights will conform to MIL–STD 1197B. Emergency, repair, and utility servicing vehicles; truck tractors designed to haul oversized slow-moving loads; truck wreckers; and other vehicles that frequently deviate from or obstruct normal traffic patterns will be equipped with 360-degree flashing warning signal lamps. Lights will be red and white for ambulance and firefighting vehicles, blue or red and blue for law enforcement vehicles, and amber for all others. Exceptions such as the following are granted to conform to local and State laws or host nation agreements:
- (1) School buses are authorized red and yellow flashing lights but not sirens.
 - (2) For installation of lights on ambulances, see AR 40-4.
- (3) These devices will be used by emergency vehicles only when responding to emergency calls, when required to warn traffic of emergency vehicles stopped at the scene of an accident, or when military vehicles are used in the pursuit of offenders. They will be used by school buses only when loading or unloading passengers.
- g. Rotating or 180-degree flashing amber lights will be used for cranes (wreckers), oversize or overweight vehicles, snow-removal equipment, other highway maintenance vehicles, and for the first and last vehicle in a convoy. (Host nation agreements may permit additional vehicles in convoy to use these lights.)
- (1) When used on other than convoy vehicles, these lights will be used only when their operation is not a hazard to other traffic.
- (2) When used on convoy vehicles, the lights will be on at all times when the convoy is operating outside the military installation.
- (3) Rotating lights or beacons will be mounted so as not to be a hazard or nuisance to the driver or to other drivers. They must have 360-degree visibility.
- h. Commanders are encouraged to develop and use other devices that increase the safety of operations. The installation of safety devices on motor vehicles requires approval per AR 750–10.
- *i.* All military vehicles will be equipped with and use chock blocks when parked on inclines or whenever or wherever maintenance is being performed.

2-17. Safe movement of personnel

- a. Personnel will be transported in passenger vehicles such as sedans, station wagons, or buses. When such vehicles are not available, cargo vehicles may be used under provisions of paragraph b below. Transportation to and from troop training or maneuver areas may be done with cargo trucks provided such transportation is part of training. The only semitrailer authorized for personnel transport is the van, personnel carrier 80-passenger, Line Item No. S-74901, NSN 2330-01-090-7846. No other semitrailers are considered safe to transport personnel; their use for this purpose requires an HQDA waiver. When transporting personnel in cargo truck convoys, the last vehicle in the convoy will not be used to carry passengers.
- b. When more than one person (besides the driver) is transported in a cargo truck, there must be adequate fixed seating. Occupants will be seated when the vehicle is in motion.
- (1) Personnel may be transported without fixed seats for short distances on post provided each passenger remains seated wholly within the body and the body is equipped with stakes or sideboards. Canvas tops will be in place with sides rolled down when cargo space is used for passengers.
- (2) Whenever a dump truck is used to transport personnel, positive locking devices will be used to prevent accidental activation of hoist controls.
 - c. The number of passengers transported in buses or converted

cargo vehicles in "over-the-road "service will be restricted to the designated seating capacity.

- d. Riding on loads or partial loads of nonhazardous material will be permitted only when it would be dangerous to ride in the cab or front seat, or when guard or servicing personnel are involved. Personnel will ride on loads only when—
 - (1) Loads are adequately secured.
- (2) Riders are provided with enough room to keep their bodies entirely within the top and sides of vehicles and loads.
- (3) Appropriate safety devices are attached to the vehicle to provide safe carrying. (Examples are hanging steps on the rear of garbage trucks or a spanner board that permits seating all personnel.)
- e. Before starting the engine, drivers transporting passengers in cargo trucks must place the vehicle in first gear, or park if automatic, and set the handbrake, then—
- (1) Walk to the rear of the truck to ensure that the tailgate, safety device, or safety strap is in place and that all passengers are seated. (After stopping, the driver will walk to the rear of the vehicle and release the safety device or lower the tailgate before permitting passengers to dismount.)
- (2) Warn personnel not to jump from cargo beds and, after dismounting, to move away from traveled portions of the roadway.
- (3) Refuse to move a motor vehicle in which anyone is in an unsafe position. (An unsafe position could be standing; attempting to ride between the cab and body; hanging on sides, running boards, or fenders; sitting on tailgates or sides of the truck; or extending arms or legs.)
- f. Drivers will not back any type of vehicle before first checking for clearance and giving warning. If rear visibility is blocked by cargo or otherwise limited, drivers will use ground guides. (Drivers of all buses with a passenger-carrying capacity greater than 12 and of 2½-ton and larger trucks will use ground guides when backing.) Ground guides must be in view of the driver at all times. If ground guides are not available, the driver will dismount, go to the rear of the vehicle, and check clearance before backing.
- g. Additional guidance on the safe transportation of personnel is in FM 21-305.

2-18. Safe tactical vehicle operations

- a. Tactical operations put special demands on vehicle operators because of adverse environmental factors (rain, snow, mud, and dust), fatigue, and blackout operations. The following safety requirements apply:
- (1) Before a tracked vehicle is started in an assembly area, a crewmember will walk completely around the vehicle to ensure that no one is in danger.
- (2) Tracked vehicle movement within or through an assembly area requires ground guides front and rear. Guides must be able to see each other and be visible to the driver.
- (3) Wheeled vehicles will normally require one ground guide; however, two ground guides will be used when backing a wheeled vehicle when vision is restricted.
- b. Commanders responsible for conducting tactical operations (actual or training) that involve motor vehicles and equipment will apply all normal safety standards (including speed limits, passenger transportation standards, and vehicle maintenance) unless it is necessary to deviate to accomplish a mission. In training situations, such deviations may be authorized only by the unit commander. Commanders will evaluate the significance of the assumed risk versus the training benefit.
- c. Safety procedures will be included in standing operating procedures for training related to vehicle operations.

2-19. Emergency services—medical and accident site control

Commanders of Army installations will ensure that there are procedures to—

a. Provide prompt detection of and response to traffic accidents or incidents.

- b. Sustain and prolong life through proper first aid measures.
- c. Provide prompt medical evacuation of injured personnel to the nearest medical facility.
- d. Ensure that the accident site is secured and preserved to the maximum extent possible to determine the need for centralized accident investigation, ground (CAIG). While this preservation must not compromise local highway safety, accident site physical evidence is vital to CAIG. If the accident occurs on a public highway or major intersection that precludes securing the site, local safety personnel must make maximum use of color photographs (other than self-developing) and diagrams before wreckage removal.
- e. Ensure rapid, orderly, and safe removal of accident wreckage, spills, and debris from roads. Whenever appropriate, Army personnel will work with local authorities to remove debris safely from off-post accidents that involve Army equipment.
- f. Move disabled vehicles off the roadway or as far to the side as possible until they can be towed away or repaired. Disabled vehicles will be towed, not pushed, per applicable technical publications and at speeds safe for the size and condition of the vehicle and road surface. Only the driver will ride in a towed vehicle and only when absolutely necessary. However, safety devices (chains/cables) will be connected to the towing vehicle to prevent the towed vehicle from breaking loose in the event the tow bar fails or becomes disconnected.

2–20. Motor vehicle operations in the vicinity of aircraft Drivers must use extreme caution when operating vehicles in the vicinity of parked or operating aircraft. As a minimum, vehicle drivers will—

- a. Not approach operating aircraft without clearance from the aircraft commander.
- b. Stow vehicle radio antennas before approaching an aircraft parking or operational area.
- c. Not drive vehicles directly toward an aircraft. Brake failure or accelerator malfunctions could cause a serious accident.
- d. Keep at least 10 feet between vehicles and aircraft. Vehicles with catalytic converters should stay at least 50 feet from aircraft.
- e. Not back a vehicle into a position near an aircraft. If a vehicle must be backed into position, the driver should come to a full stop at least 20 feet from the aircraft or helicopter rotor blades, use a ground guide, and follow the guide's signals.
- f. Not leave vehicles unattended close to an aircraft unless the vehicle engine is off, the transmission is in low gear, or park if automatic, and the parking brake is set.
 - g. Conduct refueling operations in accordance with FM 10-68.

Chapter 3 Prevention of Privately Owned Vehicle Accidents

3-1. Genera

- a. POV accidents most often occur off duty and on post, outside the presence of Army supervision. Commanders can provide direct influence through information, motivation, and guidance given to POV operators before they leave Army control. These efforts will be on a cost-effective basis within the overall accident prevention program.
- b. Soldiers have a duty to avoid unnecessary injury to themselves by using safety devices and equipment. When a violation occurs, commanders should consider a full range of possible actions before selecting the appropriate courses of action to deal with the violation. Such actions include but are not limited to suspension or loss of onpost driving privileges, removal of the vehicle from the installation, and additional training in the particular aspect of the safety violation.
- c. National Safety Council statistics have consistently shown that the use of restraint systems may reduce by 50 percent the chance of death or serious injury in an automobile accident and may prevent injury during sudden braking. In addition, using the restraint system